<p style="text-align: center;">**CLAIMS**</p>

1   1-32. (canceled)

1   33. (currently amended). A network device for a communication network, the network device

2   comprising:

3   (a) a database table adapted to[[:]] [[(1)]] store one or more sets of one or more

4   parameters, each set corresponding to a different identifier; and

5   ~~(2) allow updating of a first set of one or more parameters, the first set~~

6   ~~corresponding to a first identifier, wherein the updating is based on data packets received from a~~

7   ~~first transmitter corresponding to the first identifier; and~~

8   (b) a receiver adapted to:

9   (1) receive a first data packet from [[the]]a first transmitter, the first data packet

10   comprising a header and a payload;

11   (2) receive a first auxiliary coding corresponding to the first data packet, wherein:

12   the first auxiliary coding identifies [[the]]a first identifier;

13   (3) recover the first identifier from the first auxiliary coding;

14   (4) retrieve [[the]]a first set of one or more parameters from the database table

15   based on the first identifier; and

16   (5) process at least a portion of the first data packet based on the first set of one or

17   more parameters[[;]]

18   ~~(6) update the first set of one or more parameters based on the processing; and~~

19   ~~(7) provide to the database table, for storage, the updated first set of one or more~~

20   ~~parameters~~.

1   34. (previously presented) The network device of claim 33, wherein the communication network

2   is a HomePNA network.

1   35. (previously presented) The network device of claim 33, wherein:

2   the first data packet further comprises a training preamble;

3   the first auxiliary coding is inserted within the training preamble of the first data packet.

1   36. (previously presented) The network device of claim 33, wherein:

2   the first data packet further comprises a training preamble;

3   the first auxiliary coding is encoded using frequency shift keying (FSK) modulation by

4 frequency division;

5   the first auxiliary coding is encoded at a frequency different from a frequency for the first

6 data packet;

7   receipt of the first auxiliary coding overlaps in time with receipt of the training preamble

8 of the first data packet.

1   37. (previously presented) The network device of claim 33, wherein the first auxiliary coding is

2 received before the first data packet is received.

1   38. (currently amended) The network device of claim 33, further comprising a <u>second</u> transmitter

2 adapted to:

3   (1) generate a second auxiliary coding for transmittal with a second data packet, wherein:

4   the second auxiliary coding identifies a second identifier;

5   the second identifier identifies the <u>second</u> transmitter; and

6   the second auxiliary coding is different from the second data packet;

7   (2) transmit the second auxiliary coding and the second data packet to a second network

8 device.

1   39. (currently amended) The network device of claim 38, wherein:

2   the <u>second</u> transmitter comprises a first RF front end; and

3   the <u>second</u> transmitter is adapted to transmit both the second auxiliary coding and the

4 second data packet using the first RF front end.

1   40. (currently amended) The network device of claim 38, wherein:

2   the <u>second</u> transmitter comprises a first RF front end and a second RF front end;

3   the <u>second</u> transmitter is adapted to transmit the second auxiliary coding using the first

4 RF front end; and

5   the <u>second</u> transmitter is adapted to transmit the second data packet using the second RF

6 front end.

1 41. (previously presented) The network device of claim 33, wherein the first auxiliary coding

2 comprises five or fewer symbols.

1 42. (previously presented) The network device of claim 33, wherein the first auxiliary coding

2 comprises five or fewer bits.

1 43. (previously presented) The network device of claim 33, wherein the first identifier is a station

2 identifier for the first transmitter.

1 44. (previously presented) The network device of claim 33, wherein:

2   the first data packet header includes a source address for the first transmitter; and

3   the first identifier is not the same as the source address for the first transmitter.

1 45. (previously presented) The network device of claim 33, wherein the first set of one or more

2 parameters comprises at least one of a receiving-equalizer start value, a timing-recovery start

3 value, an automatic-gain-controller start value, and an echo-canceller start value.

1 46. (currently amended) The network device of claim 33, wherein the ~~updating~~ <u>the first set of</u>

2 <u>one or more parameters</u> is based on moving averages, from past data packets received from the

3 first transmitter, of one or more of a receiving-equalizer value, a timing-recovery value, an

4 automatic-gain-controller value, and an echo-canceller value.

1 47. (previously presented) The network device of claim 33, wherein:

2   the first auxiliary coding is received as a first set of pulses received substantially

3 immediately before the first data packet; and

4   the first identifier is encoded in the first set of pulses by variable timing intervals between

5 adjacent pulses in the first set of pulses.

48. (currently amended) The network device of claim 33, wherein the database table is further adapted to store ~~the first~~ each different identifier corresponding to each set of one or more parameters.

49. (currently amended) A method for a network device for a communication network, wherein the network device comprises a database table and a receiver, the method comprising:

    (1) storing a first set of one or more parameters in the database table, the first set corresponding a first identifier;

    (2) receiving a first data packet comprising a header and a payload from a first transmitter;

    (3) receiving a first auxiliary coding corresponding to the first data packet, wherein:

        the first auxiliary coding identifies the first identifier;

    (4) recovering the first identifier from the first auxiliary coding;

    (5) retrieving the first set of one or more parameters from the database table based on the first identifier; and

    (6) processing at least a portion of the first data packet based on the first set of one or more parameters[[;]]

    ~~(7) updating the first set of one or more parameters based on the processing; and~~

    ~~(8) providing to the database table, for storage, the updated first set of one or more parameters~~.

50. (previously presented) The method of claim 49, wherein the communication network is a HomePNA network.

51. (previously presented) The method of claim 49, wherein:

    the first data packet further comprises a training preamble;

    the first auxiliary coding is inserted within the training preamble of the first data packet.

52. (previously presented) The method of claim 49, wherein:

    the first data packet further comprises a training preamble;

3   the first auxiliary coding is encoded using frequency shift keying (FSK) modulation by

4   frequency division;

5   the first auxiliary coding is encoded at a frequency different from a frequency for the first

6   data packet;

7   receipt of the first auxiliary coding overlaps in time with receipt of the training preamble

8   of the first data packet.

1   53. (previously presented) The method of claim 49, wherein the first auxiliary coding is received

2   before the first data packet is received.

1   54. (currently amended) The method of claim 49, where the network device further comprises a

2   <u>second</u> transmitter, the method further comprising:

3   (1) generating a second auxiliary coding for transmittal with a second data packet,

4   wherein:

5   the second auxiliary coding identifies a second identifier;

6   the second identifier identifies the <u>second</u> transmitter; and

7   the second auxiliary coding is different from the second data packet;

8   (2) transmitting the second auxiliary coding and the second data packet to a second

9   network device.

1   55. (currently amended) The method of claim 54, wherein:

2   the <u>second</u> transmitter comprises a first RF front end; and

3   the method comprises transmitting both the second auxiliary coding and the second data

4   packet using the first RF front end.

1   56. (currently amended) The method of claim 54, wherein:

2   the <u>second</u> transmitter comprises a first RF front end and a second RF front end; and

3   the method comprises:

4   transmitting the second auxiliary coding using the first RF front end; and

5   transmitting the second data packet using the second RF front end.

1   57. (previously presented) The method of claim 49, wherein the first auxiliary coding comprises
2   five or fewer symbols.

1   58. (previously presented) The method of claim 49, wherein the first auxiliary coding comprises
2   five or fewer bits.

1   59. (previously presented) The method of claim 49, wherein the first identifier is a station
2   identifier for the first transmitter.

1   60. (previously presented) The method of claim 49, wherein:
2   the first data packet header includes a source address for the first transmitter; and
3   the first identifier is not the same as the source address for the first transmitter.

1   61. (previously presented) The method of claim 49, wherein the first set of one or more
2   parameters comprises at least one of a receiving-equalizer start value, a timing-recovery start
3   value, an automatic-gain-controller start value, and an echo-canceller start value.

1   62. (currently amended) The method of claim 49, wherein the ~~updating~~ the first set of one or
2   more parameters is based on moving averages, from past data packets received from the first
3   transmitter, of one or more of a receiving-equalizer value, a timing-recovery value, an automatic-
4   gain-controller value, and an echo-canceller value.

1   63. (previously presented) The method of claim 49, wherein:
2   the first auxiliary coding is received as a first set of pulses received substantially
3   immediately before the first data packet; and
4   the first identifier is encoded in the first set of pulses by variable timing intervals between
5   adjacent pulses in the first set of pulses.

1   64. (previously presented) The method of claim 49, further comprising storing the first identifier
2   in the database table.

1   65. (new) The network device of claim 33, wherein the first set of one or more parameters is
2   based on previously performed training results from a previous packet received from the first
3   transmitter.

1   66. (new) The method of claim 49, wherein the first set of one or more parameters is based on
2   previously performed training results from a previous packet received from the first transmitter.